Abstract of the Disclosure

A method and apparatus are described for protecting cache lines allocated to a cache by a run-ahead prefetcher from premature eviction, preventing thrashing.

The invention also prevents premature eviction of cache lines still in use, such as lines allocated by the run-ahead prefetcher but not yet referenced by normal execution. A protection bit indicates whether its associated cache line has protected status in the cache or whether it may be evicted.

"Express Mail" mailing label number: <u>EL600376518US</u>
Date of Deposit: <u>December 20, 2000</u>
This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.